



LIEBHERR

OIL ANALYSIS REPORT

| | |
|-----------------|--------|
| WEAR | NORMAL |
| CONTAMINATION | NORMAL |
| FLUID CONDITION | NORMAL |

Machine Id
LIEBHERR LRB18 111114
Component
Left Travel
Fluid
GEAR OIL SAE 80W90 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|-------------|----------|----------|
| Sample Number | | Client Info | | LHMC165906 | --- | --- |
| Sample Date | | Client Info | | 21 May 2024 | --- | --- |
| Machine Age | hrs | Client Info | | 487 | --- | --- |
| Oil Age | hrs | Client Info | | 487 | --- | --- |
| Filter Age | hrs | Client Info | | 0 | --- | --- |
| Oil Changed | | Client Info | | Changed | --- | --- |
| Filter Changed | | Client Info | | Not Changed | --- | --- |
| Sample Status | | | | NORMAL | --- | --- |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|------|-----|-----|
| Iron | ppm | ASTM D5185m | >500 | 78 | --- | --- |
| Chromium | ppm | ASTM D5185m | >20 | 1 | --- | --- |
| Nickel | ppm | ASTM D5185m | >5 | 0 | --- | --- |
| Titanium | ppm | ASTM D5185m | | <1 | --- | --- |
| Silver | ppm | ASTM D5185m | | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185m | >100 | <1 | --- | --- |
| Lead | ppm | ASTM D5185m | >10 | 0 | --- | --- |
| Copper | ppm | ASTM D5185m | >60 | 0 | --- | --- |
| Tin | ppm | ASTM D5185m | >5 | <1 | --- | --- |
| Vanadium | ppm | ASTM D5185m | | <1 | --- | --- |
| White Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- | --- |

CONTAMINATION

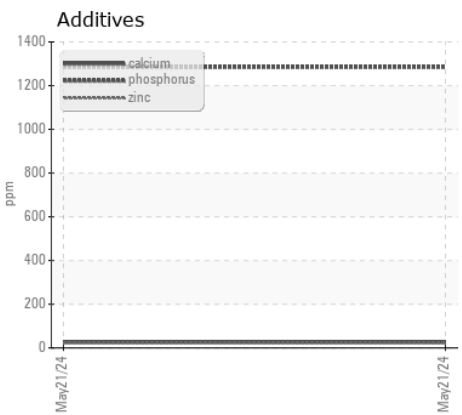
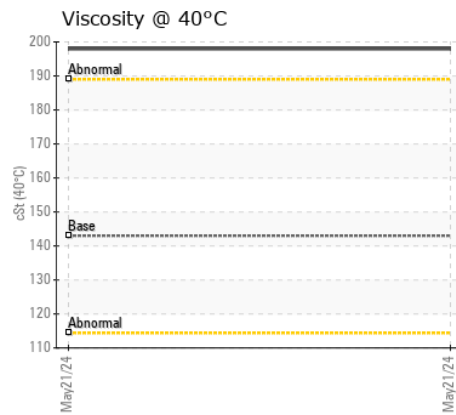
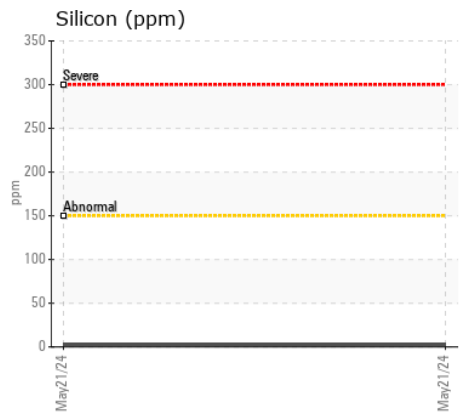
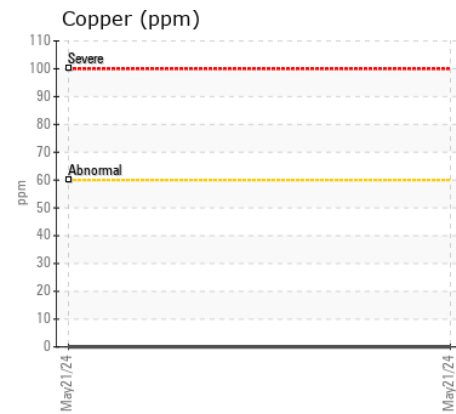
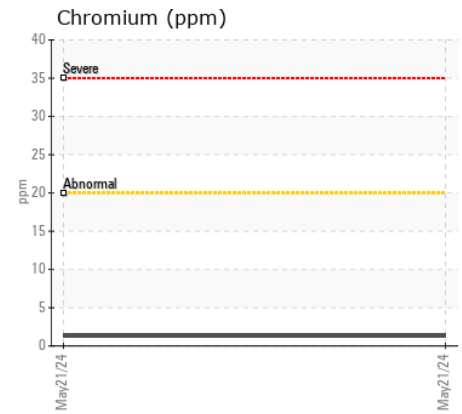
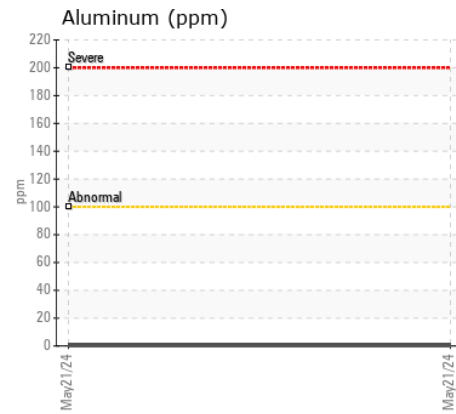
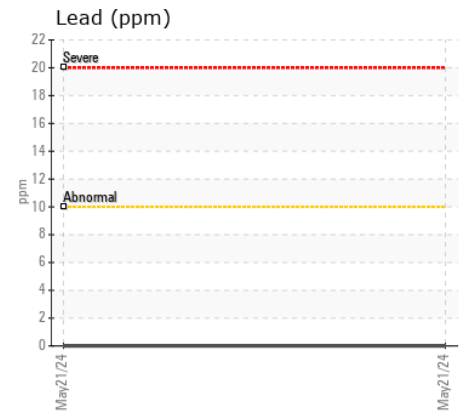
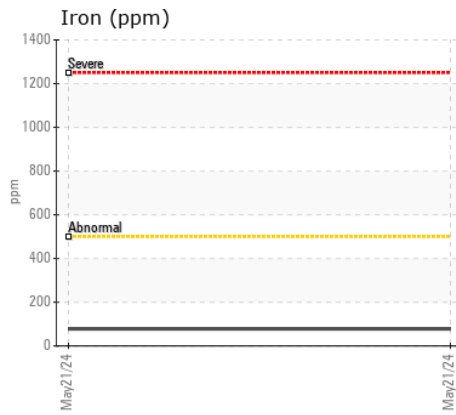
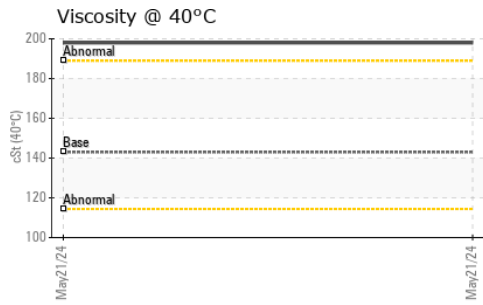
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|-------------|-------|-------|-----|-----|
| Silicon | ppm | ASTM D5185m | >150 | 3 | --- | --- |
| Potassium | ppm | ASTM D5185m | >20 | 11 | --- | --- |
| Water | | WC Method | >0.2 | NEG | --- | --- |
| Silt | scalar | *Visual | NONE | NONE | --- | --- |
| Debris | scalar | *Visual | NONE | NONE | --- | --- |
| Sand/Dirt | scalar | *Visual | NONE | NONE | --- | --- |
| Appearance | scalar | *Visual | NORML | NORML | --- | --- |
| Odor | scalar | *Visual | NORML | NORML | --- | --- |
| Emulsified Water | scalar | *Visual | >0.2 | NEG | --- | --- |

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

| | | | | | | |
|-------------|-----|-------------|-------|-------|-----|-----|
| Sodium | ppm | ASTM D5185m | >170 | 6 | --- | --- |
| Boron | ppm | ASTM D5185m | 400 | 9 | --- | --- |
| Barium | ppm | ASTM D5185m | 200 | 23 | --- | --- |
| Molybdenum | ppm | ASTM D5185m | 12 | <1 | --- | --- |
| Manganese | ppm | ASTM D5185m | | 1 | --- | --- |
| Magnesium | ppm | ASTM D5185m | 12 | <1 | --- | --- |
| Calcium | ppm | ASTM D5185m | 150 | 26 | --- | --- |
| Phosphorus | ppm | ASTM D5185m | 1650 | 1285 | --- | --- |
| Zinc | ppm | ASTM D5185m | 125 | 24 | --- | --- |
| Sulfur | ppm | ASTM D5185m | 22500 | 32137 | --- | --- |
| Visc @ 40°C | cSt | ASTM D445 | 143 | 198 | --- | --- |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LHMC165906
Lab Number : 06195812
Unique Number : 11057935
Test Package : MOB 1

Received : 30 May 2024
Tested : 31 May 2024
Diagnosed : 31 May 2024 - Wes Davis

AMERICAN STATE EQUIPMENT CO.
 2055 SOUTH 108TH STREET
 MILWAUKEE, WI
 US 53227
 Contact: RAY SCHMIDT
 RSCHMIDT@AMSTATE.COM
 T: (414)234-0854
 F: (414)541-1892

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)